

CLAIMS

1. An information processing apparatus for communicating wirelessly with administrative system and for transmitting data to a second information processing apparatus via said administrative system, said information processing apparatus comprising:

communicating means for transmitting data to said administrative system and for transmitting or receiving information for controlling the wireless communication with said administrative system;

measuring means for measuring a reception level of said information or of said data being received by said communicating means; and

controlling means for controlling transmission power in a manner allowing said communicating means to transmit said information or said data;

wherein said controlling means controls said transmission power in such a manner that a first item of said information signaling a start of transmission of said data is transmitted at a maximum controllable transmission power level or at a first transmission power level close to said maximum controllable transmission power level; and

wherein, if a second item of said information is

transmitted by said administrative system based on the first information item to enable the start of transmission of said data and is received by said communicating means, then said measuring means measures a reception level of the second information item and said controlling means controls the power for transmitting said data based on said reception level measured by said measuring means.

2. The information processing apparatus according to claim 1, further comprising a plurality of amplifying means for amplifying a signal level for transmitting said first information item or said data;

wherein said plurality of amplifying means amplify said signal level at different amplification factors; and

wherein said controlling means controls said power for transmitting said first information item or said data by selecting any one of said plurality of amplifying means.

3. The information processing apparatus according to claim 1, wherein said controlling means compares a data length of said data to be transmitted with a threshold value;

wherein, if said data length is less than said threshold value, then said controlling means exercises

control in such a manner that said data is transmitted at said first transmission power level; and

wherein, if said data length is greater than said threshold value, then said controlling means exercises control in such a manner that said data is transmitted at a second transmission power level lower than said first transmission power level.

4. The information processing apparatus according to claim 1, wherein the communication with said administrative system is carried out according to IEEE 802.11 standards, and wherein said first information item is an RTS frame and said second information item is a CTS frame.

5. An information processing method for use with an information processing apparatus for communicating wirelessly with administrative system and for transmitting data to a second information processing apparatus via said administrative system, said information processing method comprising the steps of:

firstly controlling transmission power in such a manner that first information signaling a start of transmission of said data is transmitted at a maximum controllable transmission power level or at a first transmission power level close to said maximum

controllable transmission power level;

controlling reception of second information transmitted by said administrative system based on said first information, said second information enabling the start of transmission of said data;

measuring a reception level of said second information; and

secondly controlling transmission power in such a manner that said data is transmitted at a transmission power level based on said reception level of said second information measured in said measuring step.

6. A recording medium which stores a program in a manner readable by a computer, said program causing said computer to execute a process allowing an information processing apparatus to communicate wirelessly with administrative system and to transmit data to a second information processing apparatus via said administrative system, said program comprising the steps of:

firstly controlling transmission power in such a manner that first information signaling a start of transmission of said data is transmitted at a maximum controllable transmission power level or at a first transmission power level close to said maximum controllable transmission power level;

controlling reception of second information transmitted by said administrative system based on said first information, said second information enabling the start of transmission of said data;

measuring a reception level of said second information; and

secondly controlling transmission power in such a manner that said data is transmitted at a transmission power level based on said reception level of said second information measured in said measuring step.

7. A program for causing a computer to execute a process allowing an information processing apparatus to communicate wirelessly with administrative system and to transmit data to a second information processing apparatus via said administrative system, said program comprising the steps of:

firstly controlling transmission power in such a manner that first information signaling a start of transmission of said data is transmitted at a maximum controllable transmission power level or at a first transmission power level close to said maximum controllable transmission power level;

controlling reception of second information transmitted by said administrative system based on said

first information, said second information enabling the start of transmission of said data;

measuring a reception level of said second information; and

secondly controlling transmission power in such a manner that said data is transmitted at a transmission power level based on said reception level of said second information measured in said measuring step.

8. An information processing apparatus for transmitting data to a second information processing apparatus via administrative system which, upon receipt of first information requesting permission of a start of data transmission, transmits second information enabling the start of the data transmission, said information processing apparatus comprising:

communicating means which receives information from said administrative system and which, on transmitting said data to said second information processing apparatus, transmits said data to said administrative system after transmission of said second information.

9. The information processing apparatus according to claim 8, wherein said communicating means designates an address of said information processing apparatus as a receiving address in said second information and

transmits said second information.

10. The information processing apparatus according to claim 8, further comprising:

measuring means for measuring a reception level of said information received by said communicating means from said administrative system or of said data transmitted by said administrative system to said second information processing apparatus; and

controlling means for controlling transmission power in a manner allowing said communicating means to transmit said second information and said data;

wherein said communicating means communicates wirelessly with said administrative system; and

wherein said controlling means controls transmission power in such a manner that said second information is transmitted at a maximum controllable transmission power level or at a first transmission power level close to said maximum controllable transmission power level, and that said data is transmitted thereafter at a transmission power level based on said reception level measured by said measuring means.

11. The information processing apparatus according to claim 10, further comprising a plurality of amplifying means for amplifying a signal level for transmitting said

second information or said data;

wherein said plurality of amplifying means amplify said signal level at different amplification factors; and

wherein said controlling means controls the power for transmitting said second information or said data by selecting any one of said plurality of amplifying means.

12. The information processing apparatus according to claim 10, wherein said controlling means compares a data length of said data to be transmitted with a threshold value;

wherein, if said data length is less than said threshold value, then said controlling means exercises control in such a manner that said data is transmitted at said first transmission power level; and

wherein, if said data length is greater than said threshold value, then said controlling means exercises control in such a manner that said data is transmitted at a second transmission power level lower than said first transmission power level.

13. The information processing apparatus according to claim 8, wherein communication with said administrative system is carried out according to IEEE 802.11 standards, and wherein said first information is an RTS frame and said second information is a CTS frame.

14. An information processing method for use with an information processing apparatus for transmitting data to a second information processing apparatus via administrative system which, upon receipt of first information requesting permission of a start of data transmission, transmits second information enabling the start of the data transmission, said information processing method comprising the steps of:

firstly controlling transmission of said second information; and

secondly controlling transmission of said data to said second information processing apparatus via said administrative system.

15. A recording medium which stores a program in a manner readable by a computer, said program causing said computer to execute a process allowing an information processing apparatus to transmit data to a second information processing apparatus via administrative system which, upon receipt of first information requesting permission of a start of data transmission, transmits second information enabling the start of the data transmission, said program comprising the steps of:

firstly controlling transmission of said second information; and

secondly controlling transmission of said data to said second information processing apparatus via said administrative system.

16. A program for causing a computer to execute a process allowing an information processing apparatus to transmit data to a second information processing apparatus via administrative system which, upon receipt of first information requesting permission of a start of data transmission, transmits second information enabling the start of the data transmission, said program comprising the steps of:

firstly controlling transmission of said second information; and

secondly controlling transmission of said data to said second information processing apparatus via said administrative system.